



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/529,599

03/30/2005

Bernd Rumpf

05037693

1676

34431 7590 11/30/2007
HANLEY, FLIGHT & ZIMMERMAN, LLC
150 S. WACKER DRIVE
SUITE 2100
CHICAGO, IL 60606

EXAMINER

WEINSTEIN, LEONARD J

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

11/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,599

Applicant(s)

RUMPF, BERND

Examiner

Leonard J. Weinstein

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the amendment of September 5, 2007. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.
2. The examiner acknowledges the amendments to claims 3 and 5-7 have put these claims in condition for examination and have overcome the objections set forth in the office action of June 14, 2007.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Eck 6,488,476. Eck teaches all the limitations for a feed unit for (claim 1) a fuel tank 1 of a motor vehicle including: a baffle 2 which has a first chamber 4 for collecting fuel, having a fuel pump 10 for sucking up fuel and having a fuel-pump suction 15 opening arranged in the vicinity of the bottom of the first chamber 4 of the baffle 2, as shown in figure 1 and defined by element 4 extending and being integral with surface of element 2, characterized in that a second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4, is connected to the first chamber 4 via a valve 16, and in that the valve 16 is a throttle valve, with the volumetric flow of fuel that is restricted by the valve 16 being smaller than the volumetric flow fed by the fuel pump 10; (claim 2) a second chamber, as

defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4, is manufactured integrally with the baffle 2, as element 4 extends and is formed integrally with the intermediate surface of element 2; (claim 4) a valve 16 is arranged in a common wall, as 16 is formed within the intermediate surface of element 2 which is integrally formed with element 4, of the first chamber 4 and of the second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4; (claim 5) a second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4, is designed as an annular chamber surrounding the first chamber 4, clearly shown in figure 1; (claim 6) a second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4, is arranged within the baffle 2 and the common wall, intermediate surface of element 2 which is integrally formed with element 4 having element 16 therein, between the first chamber 4 and the second chamber, as defined by chamber formed above and below an intermediate surface of and within element 2 and surrounding element 4, is lower than an outer wall, vertically extending walls of element 2, of the baffle 2; (claim 7) and a valve 16 is designed as an opening with a designated cross section.

5. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Harde 4,354,521. Harde teaches all the limitations for a feed unit for (claim 1) a fuel tank 1 of a motor vehicle including: a baffle 3 which has a first chamber (A1), formed by element 4, for collecting fuel, having a fuel pump 6 for sucking up fuel and having a fuel-pump suction 9 opening arranged in the vicinity of the bottom of the first chamber (A1), formed by element 4, of the baffle 3, characterized in that a second chamber (C), as defined by chamber formed

within element 3 and surrounding element 4, is connected to the first chamber (A1), formed by element 4, via a valve 15, as shown in figure 6 wherein element 15 acts as a throttle by permitting a volume of fluid to move from element 3 to a space within element 4 as it has a smaller area than the surface of the containing element which the fluid passes through, and in that the valve 15 is a throttle valve, as discussed, with the volumetric flow of fuel that is restricted by the valve 15 being smaller than the volumetric flow fed by the fuel pump 6; (claim 2) a second chamber (C), as defined by chamber formed within element 3 and surrounding element 4, is manufactured integrally with the baffle 3 (fig 6); (claim 3) a fuel unit provided with chambers, as formed by element 4 (A1) and the chamber formed by element 3 surrounding element 4 (C), are arranged at the same height, the chambers as discussed each have bottom surfaces located at the same vertical position with element 1; (claim 4) a valve 15 is arranged in a common wall 11 of the first chamber (A1), formed by element 4, and of the second chamber (C), as defined by chamber formed within element 3 and surrounding element 4 and chamber B as shown in figure 6; (claim 5) a second chamber (C), as defined by chamber formed within element 3 and surrounding element 4, is designed as an annular chamber surrounding the first chamber (A1), formed by element 4, clearly shown in figure 6; (claim 6) a second chamber (C), as defined by chamber formed within element 3 and surrounding element 4, is arranged within the baffle 3 and the common wall 11 between the first chamber (A1), formed by element 4, and the second chamber (C), as defined by chamber formed within element 3 and surrounding element 4, is lower than an outer wall, vertically extending walls of element 3, of the baffle 3; (claim 7) and a valve 15 is designed as an opening with a designated cross section.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eck 6,488,476.

Eck discloses the claimed invention including a valve throttling a volumetric flow which flows from a second chamber, as defined by chamber formed above a bottom surface of and within element 2 and surrounding element 4 (Eck), into the first chamber 4, except Eck does not disclose a volumetric flow in which a level is equalized in three to five minutes after a fuel pump has stopped. The time needed to equalize a level of fluid in a first and second chamber is a results effective variable with the results being a fluid level equalizing three to five minutes after a fuel pump has stopped. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a feed unit capable of equalizing a fluid level within two chambers of a fuel tank within 3 to 5 minutes after a pump has been stopped, since it has

been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eck 6,488,476. Eck discloses the general conditions of the claimed invention except for the express disclosure of a second chamber provided having a volume of approximately 10-20% of a baffle volume. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a second chamber comprising approximated 10-20% of a baffle volume, since the claimed values are merely an optimum or workable range. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harde 4,354,521. Harde discloses the claimed invention including a valve 15 throttling a volumetric flow which flows from a second chamber (C) into the first chamber (A1), except Harde does not disclose a volumetric flow in which a level is equalized in three to five minutes after a fuel pump has stopped. The time needed to equalize a level of fluid in a first and second chamber is a results effective variable with the results being a fluid level equalizing three to five minutes after a fuel pump has stopped. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a feed unit capable of equalizing a fluid level, by changing a cross-sectional area of a valve element of Harde, within two chambers of a fuel tank within 3 to 5 minutes after a pump has been stopped, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harde 4,354,521. Harde discloses the general conditions of the claimed invention except for the express disclosure of a second chamber provided having a volume of approximately 10-20% of a baffle volume. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a second chamber comprising approximated 10-20% of a baffle volume, since the claimed values are merely an optimum or workable range. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Response to Arguments

12. Applicant's arguments, see pgs. 4-6, filed September 5, 2007, with respect to the rejection(s) of claim(s) 1-2, 4, and 8 under 102 (b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Eck 6,488,476.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. Weinstein whose telephone number is (571) 272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Karmer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Application/Control Number:
10/529,599
Art Unit: 3746

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LJW



MICHAEL KOCZO
PRIMARY EXAMINER
A 43746